

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 4655/RH	FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/GB2004/004370	International filing date (day/month/year) 15.10.2004	Priority date (day/month/year) 17.10.2003	
International Patent Classification (IPC) or national classification and IPC E06B3/54			
Applicant Pilkington PLC et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 17.08.2005		Date of completion of this report 17.01.2006	
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer Verdonck, B Telephone No. +31 70 340-2110 	

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**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/004370

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-7 as originally filed

Claims, Numbers

1-19 received on 17.08.2005 with letter of 17.08.2005

Drawings, Sheets

1/2, 2/2 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)):
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

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**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/004370

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	3,5,6,7,15,17,18,19
	No: Claims	1,2,4,8-14,16
Inventive step (IS)	Yes: Claims	
	No: Claims	1-19
Industrial applicability (IA)	Yes: Claims	
	No: Claims	1-19

2. Citations and explanations (Rule 70.7):

see separate sheet

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Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

Reference is made to the following document:

D1: FR-A-2 777 316 (EIFFEL CONSTRUCTION METALLIQUE) 15 October 1999 (1999-10-15)

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 11 is not new in the sense of Article 33(2) PCT.

The document D1 discloses (the references in parentheses applying to this document): a laminated panel (1) comprising a first glass ply, a second glass ply and a bonding interlayer (3) said laminate having at least one bore extending through the panel whereby a sealing member (14) is placed between the plies so as to surround the bore and form a seal with the inner faces of the glass plies thereby excluding the interlayer (3) from an area surrounding the bore and a load bearing insert (13, page 5, line 25-page 6, line 22) is positioned in the area surrounding the bore from which the interlayer has been excluded.

As the method claim 1 only contains the same features, claim 1 is not novel either.

The combination of the features of dependent claim 3 (when dependent on claim 2) is neither known from, nor rendered obvious by, the available prior art, as the disc form allows an easy removal of the seal (see last lines of page 6 of the application). Also the combination of the features of claim 6 is new and inventive as injecting a fluid to form the load bearing insert is not known from and not obvious in view of the cited documents.

CLAIMS

- 1 A method for the production of a laminated panel comprising a first glass ply, a second glass ply and a bonding interlayer said laminate having at least one bore extending through the panel which is characterised in that a sealing member is placed between the plies so as to surround the bore and form a seal with the inner faces of the glass plies thereby excluding the interlayer from an area surrounding the bore and a load bearing insert is positioned in the area surrounding the bore from interlayer has been excluded.
- 2 A method according to claim 1 characterised in that the sealing member comprises a disc of a compressible material.
- 3 A method according to either of claims 1 or 2 characterised in that the sealing member is removed from the laminated panel following the completion of the lamination process.
- 4 A method according to claim 1 characterised in that the sealing member comprises a ring of a compressible material.
- 5 A method according to any of the preceding claims characterised in that the load bearing insert is positioned after the lamination process.
- 6 A method according to claim 5 characterised in that the load bearing insert is positioned by injecting a fluid into the area surrounding the bore and allowing the fluid to set to form the load bearing insert.
- 7 A method according to claim 6 characterised in that air is withdrawn from the area surrounding the bore at the same time that the fluid is introduced.
- 8 A method according to claim 1 characterised in that the sealing member comprises a ring of compressible material which extends around the perimeter of an annulus

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formed from a load bearing material and which is positioned prior to the lamination step.

- 9 A method according to claim 8 characterised in that thickness of the sealing member, prior to lamination, is greater than that of the annulus.
- 10 A method according to claim 9 characterised in that the ring of compressible material is compressed so that its thickness is substantially the same as that of the disc during the lamination process.
- 11 A laminated panel comprising a first glass ply, a second glass ply and a bonding interlayer having at least one bore passing through said panel which is characterised in that the interlayer is excluded from the area surrounding the bore and a load bearing insert is positioned in the area from which the interlayer has been excluded.
- 12 A panel according to claim 11 characterised in that it further comprises a sealing member positioned so as to surround the bore.
- 13 A panel according to claim 12 characterised in that said seal is formed by a ring of compressible material positioned so as to surround the bore.
- 14 A panel according to claim 13 characterised in that said insert comprises a load bearing disc which was positioned prior to the production of the laminate.
- ~~15 A panel according to claim 13 characterised in that the insert comprises a load bearing annulus which has formed by the setting of a fluid which fluid has been introduced into the area from which the interlayer has been excluded after the lamination process has been completed.~~
- 16 A glass assembly comprising at least one laminated panel according to any of claims 11 to 16.

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- 17 An assembly according to claim 16 characterised in that it comprises at least two laminated panels lying in the same plane and jointed to one another by means of fixing assemblies which pass through a bore in each panel.
- 18 An assembly according to claim 17 characterised in that the fixing assemblies comprise a bolt passing through a bore and acting on a plate which bridges the two panels.
- 19 An assembly according to any of claims 16 to 18 which is attached to or part of a glass façade or a glass roof.

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